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APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
10/807,372	03/24/2004	Adrian Steiner	PA-222	3962
21920 7590 12/24/2008 MEREK, BLACKMON & VOORHEES, LLC 673 S. WASHINGTON ST. ALEXANDRIA, WV 22314				
EXAMINER				
KASENGE, CHARLES R				
ART UNIT		PAPER NUMBER		
2121				
MAIL DATE		DELIVERY MODE		
12/24/2008		PAPER		

**Please find below and/or attached an Office communication concerning this application or proceeding.**

The time period for reply, if any, is set in the attached communication.

### Office Action Summary

**Application No.**

10/807,372

**Applicant(s)**

STEINER ET AL.

**Examiner**

CHARLES R. KASENGE

**Art Unit**

2121

**Period for Reply** -- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) OR THIRTY (30) DAYS, WHICHEVER IS LONGER, FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

**Status**

- 1) ☒ Responsive to communication(s) filed on 11 December 2008.
- 2a) ☐ This action is **FINAL**. 2b) ☒ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

**Disposition of Claims**

- 4) ☒ Claim(s) 1-7, 10-18, 21-29, 31, 32, 34, 37, 38, 40, 41, 43, 44, 46 and 47 is/are pending in the application.
- 4a) Of the above claim(s) \_\_\_\_\_ is/are withdrawn from consideration.
- 5) ☒ Claim(s) 47 is/are allowed.
- 6) ☒ Claim(s) 1-7, 10-18, 21-29, 31, 32, 34, 37, 38, 40, 41, 43, 44 and 46 is/are rejected.
- 7) ☐ Claim(s) \_\_\_\_\_ is/are objected to.
- 8) ☐ Claim(s) \_\_\_\_\_ are subject to restriction and/or election requirement.

**Application Papers**

- 9) ☐ The specification is objected to by the Examiner.
- 10) ☒ The drawing(s) filed on 24 March 2004 is/are: a) ☒ accepted or b) ☐ objected to by the Examiner.
- Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).
- Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).
- 11) ☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

**Priority under 35 U.S.C. § 119**

- 12) ☐ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
- a) ☐ All b) ☐ Some \* c) ☐ None of:
1. ☐ Certified copies of the priority documents have been received.
  2. ☐ Certified copies of the priority documents have been received in Application No. \_\_\_\_\_.
  3. ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).

\* See the attached detailed Office action for a list of the certified copies not received.

**Attachment(s)**

- 1) ☐ Notice of References Cited (PTO-892)
- 2) ☐ Notice of Draftsperson's Patent Drawing Review (PTO-946)
- 3) ☐ Information Disclosure Statement(s) (PTO/SB/08)  
Paper No(s)/Mail Date \_\_\_\_\_
- 4) ☐ Interview Summary (PTO-413)  
Paper No(s)/Mail Date \_\_\_\_\_
- 5) ☐ Notice of Informal Patent Application
- 6) ☐ Other: \_\_\_\_\_

**DETAILED ACTION**

***Continued Examination Under 37 CFR 1.114***

1. A request for continued examination under 37 CFR 1.114, including the fee set forth in 37 CFR 1.17(c), was filed in this application after final rejection. Since this application is eligible for continued examination under 37 CFR 1.114, and the fee set forth in 37 CFR 1.17(c) has been timely paid, the finality of the previous Office action has been withdrawn pursuant to 37 CFR 1.114. Applicant's submission filed on 12/11/08 has been entered.

***Claim Rejections - 35 USC § 102***

2. The following is a quotation of the appropriate paragraphs of 35 U.S.C. 102 that form the basis for the rejections under this section made in this Office action:

A person shall be entitled to a patent unless –

(e) the invention was described in (1) an application for patent, published under section 122(b), by another filed in the United States before the invention by the applicant for patent or (2) a patent granted on an application for patent by another filed in the United States before the invention by the applicant for patent, except that an international application filed under the treaty defined in section 351(a) shall have the effects for purposes of this subsection of an application filed in the United States only if the international application designated the United States and was published under Article 21(2) of such treaty in the English language.

3. Claims 1-4, 7, 10-16, 21-29, 31, 32, 34, 37, 38, 40, 41, 43, 44 and 46 are rejected under 35 U.S.C. 102(e) as being anticipated by Westerman et al. U.S. Patent 4,374,544. Regarding claims 1, 10, 13, 21, 25-29, 31, 32, 34, 37, 38, 40, 41, 43, 44 and 46, Westerman discloses an apparatus to control the rate of flow of a stream of pressurized fluid through a conduit, the apparatus comprising: (i) a flow measurement device for generating an output signal proportionate to the rate of flow of said fluid there through, said flow measurement device being operatively connected to said conduit (col. 2, lines 32-34; Fig. 1, #11); (ii) a flow control device operatively connected to said conduit, said flow control device including an adjustable orifice

wherein upon the opening of said orifice a portion of said stream of pressurized fluid is independently released from said conduit by said flow control device (col. 2, lines 34-39; Fig. 1, #10); and, (iii) a controller operatively connected to said flow control device and receiving said output signal generated by said flow measurement device (col. 2, lines 40-53; Fig. 1, #7) and for causing said adjustable orifice in said flow control device to open or close as necessary to maintain the flow of pressurized fluid as measured by said flow measurement device within pre-determined limits, wherein said portion of said stream of pressurized fluid independently released from said conduit by said flow control device is injected into the work stream of a wellbore (col. 1, lines 26-43; col. 8, lines 22-34) and said flow control device is part of a continuous loop fluid circuit and is adjustable to control the release of pressurized fluid from the continuous loop fluid circuit (col. 2, lines 17-39 and 62-66). Westerman discloses the use of pumps in the system and allows for the discharge of fluid from said conduit to be at a rate below the output rate of the pump (col. 7, lines 19-24).

Regarding claims 2-4, 15, 16, 22 and 23, Westerman discloses the device as claimed in claim 1 wherein said flow control device includes an automatically adjustable choke or valve (Fig. 1, #10). Westerman discloses the device as claimed in claim 1 wherein said flow measurement device includes a turbine in communication with said stream of pressurized fluid (Fig. 1, #11). Westerman discloses the device as claimed in claim 1 wherein said flow measurement device includes a pressure sensor and said output signal comprises a pressure signal (col. 2, lines 17-27; Fig. 1, #1).

Regarding claims 7, 14, and 24, Westerman discloses the device as claimed in claim 1 wherein said controller is a microprocessor control, said microprocessor control being

programmable to automatically adjust said orifice in said flow control device in accordance with fluctuations in said output signal received from said flow measurement device to maintain the flow of fluid as measured by said flow measurement device within a pre-determined range (col. 1, lines 26-43; col. 2, lines 62-64; col. 8, lines 22-34).

Regarding claims 11 and 12, Westerman inherently discloses the device as claimed in claim 10 including a visual indicator responsive to said output signal generated by said flow measurement device (pg. 7, ¶107). Westerman inherently discloses the device as claimed in claim 11 wherein said visual indicator comprises a gauge indicating the volumetric flow of fluid as measured by said flow measurement device (pg. 7, ¶107). Visual indicators are inherent to turbine meters.

*Claim Rejections - 35 USC § 103*

4. The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

(a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negated by the manner in which the invention was made.

5. Claims 5, 6, 17 and 18 are rejected under 35 U.S.C. 103(a) as being unpatentable over Westerman et al. as applied to the claims above, and further in view of Harpster U.S. Patent 4,942,763. Westerman discloses flow measurement devices but does not disclose the measurement device including a pitot tube or pilot pressure tube. Harpster discloses the device as claimed in claim 1 wherein said flow measurement device includes a pitot tube (col. 14, lines 31-34) or a pilot pressure tube (col. 10, lines 19-23).

At the time the invention was made, it would have been obvious to a person of ordinary skill in the art for Westerman's flow measurement devices to include a pitot or pilot pressure tube. One of ordinary skill in the art would have been motivated to do this since Harpster discloses them as standard components for a flow sensor (col. 10, lines 19-23 and col. 14, lines 31-34).

*Allowable Subject Matter*

6. Claim 47 is allowed.
7. The following is an examiner's statement of reasons for allowance: Regarding claim 47, the prior art of record does not disclose a controller operatively connected to said flow control device for receiving said output signal generated by said flow measurement device and for causing said adjustable orifice in said flow control device to open or close as necessary to maintain the flow of pressurized fluid as measured by said flow measurement device within pre-determined limits wherein said portion of said stream of pressurized fluid independently released from said conduit by said flow control device is injected into the work stream of a wellbore and said flow control device, together with the pump and reservoir, forming part of a continuous loop fluid circuit, said flow control device being adjustable to control the release of pressurized fluid from the continuous loop fluid circuit. The allowability, at least in part, resides in this fact.

Any comments considered necessary by applicant must be submitted no later than the payment of the issue fee and, to avoid processing delays, should preferably accompany the issue fee. Such submissions should be clearly labeled "Comments on Statement of Reasons for Allowance."

***Conclusion***

Any inquiry concerning this communication or earlier communications from the examiner should be directed to CHARLES R. KASENGE whose telephone number is (571)272-3743. The examiner can normally be reached on Monday through Friday, 8:30 - 5 pm.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Albert DeCady can be reached on 571 272-3819. The fax phone number for the organization where this application or proceeding is assigned is 571-273-8300.

Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see <http://pair-direct.uspto.gov>. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free). If you would like assistance from a USPTO Customer Service Representative or access to the automated information system, call 800-786-9199 (IN USA OR CANADA) or 571-272-1000.

CK  
December 22, 2008

/Charles R Kasenge/  
Examiner, Art Unit 2121